

(c) 5 - 60 parts by weight of a styrene-based polymeric elastomer modified with 0.1 - 10% by weight of an acid anhydride

wherein a total of the components (a), (b) and (c) is 100 parts by weight and substantially no other resin component is present in the composition,

and further comprising

(d) 30 - 200 parts by weight of a metal hydroxide, based on 100 parts by weight of the resin components.

Please add new claims 13-14 as follows:

-- 13. (New) An electrical wire according to claim 9, wherein a resin content of said composition consists essentially of said resin components (a)-(c). --

-- 14. (New) An electrical wire according to claim 9, wherein a resin content of said composition consists of said resin components (a)-(c). --

REMARKS

Claims 1-14 are pending herein. By the Office Action, claims 1-8 are withdrawn from consideration; and claims 9-12 are rejected under 35 U.S.C. §112, second paragraph, and under §102 and §103. By this Amendment, claim 9 is amended and new claims 13-14 are added. No new matter is added.

An Information Disclosure Statement with Form PTO-1449 was filed in the above-captioned patent application on August 16, 2001. Applicants have not yet received from the Examiner a copy of the Form PTO-1449 initialed to acknowledge the fact that the Examiner has considered the disclosed information. The Examiner is requested to initial and return to the undersigned a copy of the Form PTO-1449. For the convenience of the Examiner, a copy of that form is attached.

Furthermore, in the Form PTO-892 provided with the Office Action, the reference to Inoue et al. is improperly identified as U.S. Patent No. 4,772,959, rather than properly as U.S.

Patent No. 4,722,959. The Examiner is requested to correct this error, and issue a new Form PTO-892 properly identifying the reference.

I. Restriction Requirement

Claims 1-8 are withdrawn from consideration as subject to a Restriction Requirement.

On May 22, 2002, Applicants filed a Confirmation of Telephone Election in the U.S. Patent and Trademark Office to confirm the election of Group III, claims 9-12. The Election was made with traverse as no reasons for restriction existed on the record. Applicants respectfully request reconsideration and withdrawal of the Restriction Requirement.

The Restriction Requirement asserts that Groups I, II and III are distinct from each other. Although Applicants agree that the inventions of Groups I and II and III may be independent or distinct as claimed, Applicants respectfully submit that the Restriction Requirement between Group III and Groups I and II is improper, and should be withdrawn.

According to MPEP §803, there are two requirements that must be met before a proper Restriction Requirement may be made. These two requirements are: "The inventions must be independent . . . or distinct as claimed; and there must be a serious burden on the Examiner if restriction is not required . . ." (emphasis added). Applicants respectfully submit that the Office Action has failed to establish the second requirement set forth in MPEP §803, that a serious burden exists on the Examiner if restriction is not required between the Groups of claims.

In the present application, Group I is directed to a resin composition; Group II is directed to a method for producing such a resin composition; and Group III is directed to an electrical wire including the resin composition. As evidenced by the results of the search of the claims of Group III, the references disclose all of the resin composition, methods of making the resin composition, and articles formed using the resin composition. Accordingly, search and examination of the subject matter of Group III would encompass a search for the subject matter

of Groups I and II, and any additional search would not impose a serious burden upon the Examiner.

It is therefore respectfully asserted that the search and examination of the entire application could be made without serious burden. MPEP §803 states that "If the search and examination of an entire application can be made without serious burden, the Examiner must examine it on the merits, even though it includes claims to distinct or independent inventions." (Emphasis added). Because Applicants have elected Group III, directed to an electrical wire comprising the resin composition, the further search and examination of Groups I and II, directed to the resin composition and processes for forming such a resin composition, would not place a serious burden upon the Examiner.

For at least these reasons, and in order to avoid unnecessary delay and expense to Applicants and duplicative examination by the Patent Office, it is respectfully requested that the Restriction Requirement be reconsidered and withdrawn.

II. Rejection Under §112

Claims 9-12 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Applicants respectfully traverse this rejection.

Claim 9 is rejected because the word "having" is allegedly unclear. By this Amendment, claim 9 is amended to recite the transitional phrase "comprising" as suggested by the Examiner. This amendment does not alter the scope of the claims.

Claim 9 is also rejected because the word "substantially" is allegedly unclear. Applicants respectfully disagree.

Applicants respectfully submit that the claims would be readily understood by one of ordinary skill in the art. Claim 9 states that "substantially no other resin component is present in the composition." This phrase clearly and unambiguously indicates that although the composition can include other resin components other than those specified as (a)-(c), such

additional resin components are present only in minor amounts. This is described in the specification at, for example, paragraph [0026].

Furthermore, the courts have clearly held that the term "substantially" is not per se indefinite, and is acceptable claim language. See, e.g., Ex Parte Kiser, 69 USPQ 185 (Pat. Off. Bd. App. 1945); Ex Parte Gardner, 64 USPQ 137 (Pat. Off. Bd. App. 1945).

Accordingly, because the scope of the claims would be readily understood by one of ordinary skill in the art, the claims are not indefinite. Claims 9-12 satisfy the requirements of 35 U.S.C. §112, second paragraph.

The claims are thus not indefinite, and the rejection should be withdrawn.

Reconsideration and withdrawal of the rejection are respectfully requested.

III. Rejection Under §102

Claims 9-12 are rejected under 35 U.S.C. §102(b) over Inoue. Applicants respectfully traverse this rejection.

Independent claim 9 is directed to an electrical wire comprising an electrically conductive core and a covering on said core, said covering being an olefin-based resin composition comprising the following resin components: (a) 39 - 94 parts by weight of a propylene polymer having a melt flow rate of 0.1 - 5 g/10 min. and selected from propylene homopolymers and propylene-ethylene copolymers having a propylene content of at least 50% by weight, (b) 1 - 20 parts by weight of a polypropylene modified with 0.1 - 10% by weight of an acid anhydride, (c) 5 - 60 parts by weight of a styrene-based polymeric elastomer modified with 0.1 - 10% by weight of an acid anhydride, wherein a total of the components (a), (b) and (c) is 100 parts by weight and substantially no other resin component is present in the composition, and further comprising (d) 30 - 200 parts by weight of a metal hydroxide, based on 100 parts by weight of the resin components. Such a composition, and electric wiring including such a composition, is not disclosed in Inoue.

In contrast to the claimed invention, Inoue only discloses a flame-retardant olefin polymer composition comprising the following components (a), (b) and (c). 100 parts by weight of the resin component includes (a) 99 to 60% by weight of an ethylene-alpha-olefin copolymer having a density of 0.86 to 0.91 g/cm³, a boiling n-hexane insoluble matter of 10% by weight or more and a maximum peak temperature of 100°C or more in terms of differential scanning calorie meter and (b) 1 to 40% by weight of an olefin polymer modified with an unsaturated carboxylic acid or its derivative. Component (c) is 20 to 200 parts by weight of an inorganic flame retarder. Abstract. Inoue also discloses an electrical material employing the aforesaid composition. Abstract.

The Office Action asserts that Inoue discloses all of components (A)-(C) of the claimed invention, satisfying all of the instant claim limitations. However, this assertion is incorrect.

First, with respect to the component (A), Inoue does not disclose that the component is a propylene polymer selected from propylene homopolymers and propylene-ethylene copolymers having a propylene content of at least 50% by weight. At most, Inoue discloses that the material can be an ethylene-alpha-olefin copolymer. Col. 6, lines 40-60. Specific examples of the ethylene-alpha-olefin copolymer are stated to include an ethylene-propylene copolymer (having MI=0.5 g/10 min and density=0.890 g/cm³) and ethylene-propylene copolymer (having MI=1.9 g/10 min and density=0.86 g/cm³, trade name: EP02p; Japan Synthetic Rubber Co., Ltd.). Col. 11, lines 3-11. However, nowhere does Inoue disclose that the propylene content is at least 50% by weight, as claimed. Because the propylene content can vary, it would not be inherent that Inoue's polymers would have such a high propylene content, particularly in view of the fact that Inoue discloses that all of the materials must include at least ethylene in addition to the alpha-olefin.

Second, with respect to the component (B), Inoue does not disclose that the component is specifically (B) 1 - 20 parts by weight of a polypropylene modified with 0.1 - 10% by weight of an acid anhydride, as claimed. At most, Inoue discloses that the described material (b) can be an olefin polymer modified with an unsaturated carboxylic acid or a derivative thereof. Col. 7, lines 10-16. Although Inoue broadly and separately discloses that the olefin polymer can be polypropylene, that the unsaturated carboxylic acid can be maleic acid, and that the derivative can be an anhydride, such separate disclosures do not anticipate the claimed invention. Nowhere does Inoue specifically disclose selecting polypropylene from among the long list of disclosed polymers, selecting maleic acid from among the long list of disclosed unsaturated carboxylic acids, and selecting an anhydride of such maleic acid, and using those materials to form the identified component. In the Examples, Inoue discloses as the component (b) only the use of ethylene-1-butene copolymers. Col. 11, lines 15-23.

It is not sufficient that each element merely be disclosed in the reference. Rather, the reference must disclose combining those separate components according to the claimed invention. For example, the Federal Circuit clearly held in Ultradent Products, Inc. v. Life-Like Cosmetics, Inc., 127 F.3d 1065, 1071-72, 44 USPQ2d 1336, 1341-42 (Fed. Cir. 1997), that the disclosure of numerous possible combinations does not necessarily anticipate the claimed invention. The Court stated "the burden [of showing anticipation] was to show that the [reference] would describe to one of skill in the art . . . combinations meeting the limitations of the claims, from among the many possible candidates." See also In re Petering, 301 F.2d 676, 681, 133 USPQ 275, 279 (C.C.P.A. 1962), where the court held that "even though appellants' claimed compounds are encompassed by the broad generic disclosure, we do not think this disclosure by itself describes appellants' invention . . . within the meaning of 35 U.S.C. 102(b)."

In the present case, Inoue does not disclose the specific combination of materials for the component (B). Thus, Inoue does not anticipate the component (B).

Third, with respect to the component (C), Inoue does not disclose that the component is specifically (C) 5 - 60 parts by weight of a styrene-based polymeric elastomer modified with 0.1 - 10% by weight of an acid anhydride, as claimed. At most, Inoue discloses that "the following rubbers may be used together with the above mentioned olefin polymers." Inoue then discloses that the rubbers include styrene-butadiene rubber. Col. 7, lines 35-39. However, Inoue does not disclose that the rubbers, much less the specific styrene-butadiene rubber, should be specifically modified in the same manner as the component (b). That is, Inoue does not disclose that the rubber should likewise be modified with 0.1 - 10% by weight of an acid anhydride, as claimed. In fact, the Examples set forth in Inoue fail to teach the inclusion of a styrene-butadiene rubber at all, much less in the modified form required by the instant claims.

Accordingly, in total, Inoue fails to anticipate each and every limitation of the claimed invention, in the combination as claimed. Inoue thus does not anticipate claims 9-12. Reconsideration and withdrawal of the rejection are respectfully requested.

IV. Rejection Under §102

A. Hashimoto and Icenogle

Claims 9-11 are rejected under 35 U.S.C. §103(a) over Hashimoto in view of Icenogle. Applicants respectfully traverse this rejection.

As described above, the claimed invention is directed to an electrical wire comprising an electrically conductive core and a covering on said core, said covering being an olefin-based resin composition comprising the specified components (A)-(D). Component (A) is 39 - 94 parts by weight of a propylene polymer having a melt flow rate of 0.1 - 5 g/10 min. and selected from propylene homopolymers and propylene-ethylene copolymers having a propylene content of at least 50% by weight; component (B) is 1 - 20 parts by weight of a polypropylene modified with 0.1 - 10% by weight of an acid anhydride; and component (C)

is 5 - 60 parts by weight of a styrene-based polymeric elastomer modified with 0.1 - 10% by weight of an acid anhydride, wherein a total of the components (A), (B) and (C) is 100 parts by weight and substantially no other resin component is present in the composition. Such a composition, and electric wiring including such a composition, is not taught or suggested by the cited references.

Hashimoto is directed to a fire-retardant resin composition, comprising (a) a polypropylene-series resin, (b) a modified polyethylene modified with an unsaturated carboxylic acid or its derivative, (c) a metal hydrate, and (d) an ethylene-series copolymer, in a specific ratio. Hashimoto is also directed to an electric wire with a cover layer formed on the circumference of a conductor, in which the cover layer is composed of the above-described composition. Abstract. However, this composition of Hashimoto is different from the composition of the electric wire of the claimed invention.

Hashimoto fails to have rendered obvious the claimed invention, at least because Hashimoto fails to teach or suggest all of the limitations of the claimed invention. Hashimoto fails to teach or suggest at least the component (B) of the claimed invention and the claimed modification of the component (C) of the claimed invention. Hashimoto those fails to teach or suggest, as admitted in the Office Action, the inclusion of 1 - 20 parts by weight of a polypropylene modified with 0.1 - 10% by weight of an acid anhydride, and the inclusion of 5 - 60 parts by weight of a styrene-based polymeric elastomer that is modified with 0.1 - 10% by weight of an acid anhydride.

To overcome these deficiencies of Hashimoto, the Office Action cites Icenogle. The Office Action argues that Icenogle discloses the use of a polypropylene modified with an acid anhydride, and that it would have been obvious to modify the styrene-based polymeric elastomer with an acid anhydride. Applicants respectfully disagree.

It is axiomatic in patent law that two references can not be combined to render obvious the claimed invention where there is no motivation in the references or elsewhere to make the

asserted combination. For example, the Federal Circuit held in In re Oetiker that "[t]here must be some reason, suggestion or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination." 977 F.2d 1443, 1447, 24 USPQ2d 1443, 1446 (Fed. Cir. 1992). See also In re Geiger, 815 F.2d 686, 2 USPQ2d 1276 (Fed. Cir. 1987) ("Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination.").

That is, it is not enough that a reference may be capable of being modified so as to arrive at a claimed invention. To the contrary, the prior art must have suggested the desirability of such modification to one of ordinary skill in the art at the time the invention was made. As stated in Interconnect Planning Corp. v. Feil:

When prior art references require selective combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the patent itself. There must be 'something in the prior art as a whole to suggest the desirability, and thus the obviousness of making the combination.' Critical to the analysis is an understanding of the particular results achieved by the new combination.

774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985) (citations omitted).

In the present case, the Office Action has failed to show any motivation for one of ordinary skill in the art to have combined the cited references in a manner to have rendered obvious the claimed invention. Nowhere does either reference teach or suggest that either of the disclosed compositions should be modified so as to arrive at the claimed invention.

As described above, Hashimoto is directed to a composition that includes three resin components. However, the composition differs from the claimed composition in two of the three components. Icenogle is directed to a composition that includes only two resin components, where one component is a specifically defined block copolymer. Thus, neither composition corresponds to the claimed invention, and any combination would not provide the claimed invention.

To support the asserted combination, the Office Action merely asserts that Icenogle expresses a preference for polypropylene over the polyethylenes disclosed in Hashimoto. However, if that were truly the case, then one of ordinary skill in the art would not have been motivated to selectively combine the cited references, but instead would merely have been motivated to utilize, in whole, the composition of Icenogle. The Office Action's assertion also ignores the fact that Hashimoto's composition already contains a polypropylene-series resin. One of ordinary skill in the art, looking at the composition of Hashimoto, would not have been motivated to select a single component from the unitary composition of Icenogle, and to have incorporated that component into Hashimoto's composition.

Moreover, the claimed invention differs from the composition of Hashimoto with respect to at least both components (B) and (C). Even if one of ordinary skill in the art were motivated to select the polypropylene resin of Icenogle, no motivation has been shown for selecting the modified styrene-based polymeric elastomer of the claimed component (C).

It is impermissible within the framework of 35 U.S.C. §103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation to which reference fairly suggests to one of ordinary skill in the art. In re Wesslau, 147 USPQ 391, 393 (CCPA 1965). Likewise, it has been further held that the reason, suggestion or motivation for combining the references "can not come from the applicant's invention itself." In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

That is, the motivation for combining the references can not be a product of hindsight reconstruction of the claimed invention based on applicant's own disclosure. Such a hindsight reconstruction has clearly been made in the present Office Action. The Office Action asserts that the claimed invention would have been obvious based on a hindsight selection of the claimed limitations from the different cited references, as evidenced by the entire lack of motivation to combine those references.

For at least these reasons, the claimed invention would not have been obvious over the cited references. Reconsideration and withdrawal of the rejection are respectfully requested.

B. Hashimoto, Icenogle and Rolland

Claim 12 is rejected under 35 U.S.C. §103(a) over Hashimoto in view of Icenogle and further in view of Rolland. Applicants respectfully traverse this rejection.

For all of the reasons described above, the primary references Hashimoto and Icenogle fail to teach or suggest all of the limitations of independent claim 9. The cited references fail to teach or suggest at least the limitations with respect to the claimed components (B) and (C) of the resin composition.

Rolland is cited as disclosing the limitations of dependent claim 12, which depends from claim 9. However, regardless of the asserted disclosures of Rolland, Rolland fails to overcome the above-described deficiencies of Hashimoto and Icenogle. Thus, any combination of the cited references, including Rolland, would not have rendered obvious the claimed invention.

For at least these reasons, the claimed invention would not have been obvious over the cited references. Reconsideration and withdrawal of the rejection are respectfully requested.

V. Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

Should the Examiner believe that anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to telephone Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,


James A. Oliff
Registration No. 27,075


Joel S. Armstrong
Registration No. 36,430

Attachments:

Appendix
Form PTO-1449

JAO:JSA

Date: September 3, 2002

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE
AUTHORIZATION
Please grant any extension
necessary for entry;
Charge any fee due to our
Deposit Account No. 15-0461

APPENDIX

Changes to Claims:

New claims 13-14 are added.

9. (Amended) An electrical wire having comprising an electrically conductive core and a covering on said core, said covering being an olefin-based resin composition comprising the following resin components:

(a) 39 - 94 parts by weight of a propylene polymer having a melt flow rate of 0.1 - 5 g/10 min. and selected from propylene homopolymers and propylene-ethylene copolymers having a propylene content of at least 50% by weight,

(b) 1 - 20 parts by weight of a polypropylene modified with 0.1 - 10% by weight of an acid anhydride,

(c) 5 - 60 parts by weight of a styrene-based polymeric elastomer modified with 0.1 - 10% by weight of an acid anhydride

wherein a total of the components (a), (b) and (c) is 100 parts by weight and substantially no other resin component is present in the composition,

and further comprising

(d) 30 - 200 parts by weight of a metal hydroxide, based on 100 parts by weight of the resin components.